

General Specifications

Model WP1P Pulse Repeater

JUXTA

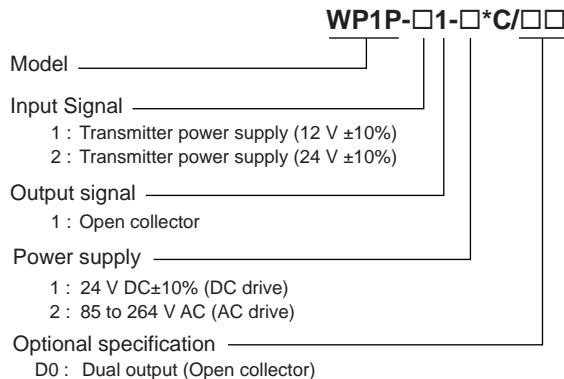
GS 77J09P01-01E

■ General

The WP1P is a compact, front terminal connection type pulse repeater that converts pulses from voltage-free contacts, open collector contacts, voltage, and current into isolated transistor switch pulses.

- With built-in 12 V or 24 V power supply for transmitter inputs.
- Internal filter can be set to eliminate chattering. (In cases where the input frequency range is up to 100Hz, the pulse width is 3ms or more.)
- 2000 V AC withstand voltage specifications are available upon requests.

■ Model and Suffix Codes



■ Ordering Information

Specify the following when ordering.

- Model and suffix codes :e.g. WP1P-21-2*C

■ Input/Output Specifications

Input signal:

2-wire type: Voltage-free contact pulse, voltage pulse, or current pulse (transmitter power supply available)

3-wire type: Voltage pulse or current pulse (transmitter power supply available)

Input resistance: 15 kΩ or more (for contact or voltage pulse)

Internal load resistance (for current pulse): 200 Ω, 510 Ω, 1 kΩ (selectable with switch inside)

Input frequency: $0 < FR \leq 6$ kHz (FR=input frequency)
In case the input is voltage pulse and the swing is 5 V or more, $0 < FR \leq 10$ kHz

Minimum input pulse width: ON; 60 μs, OFF; 60 μs

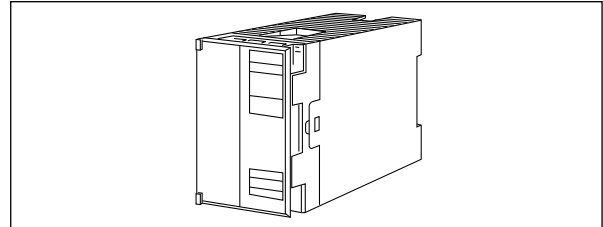
Transmitter power supply: 12 V DC±10%, 24 V DC±10%, 30mA or less

Contact input type: Relay contact or transistor ON/OFF contact

Contact resistance:

Close: 200 Ω or less,
Open: 100 kΩ or more

Contact capacity: 15 V DC, 15 mA maximum



Filter: Switch selectable for set or release (filter time constant; 10 ms)

Swing width: EH-EL≥3 V

Voltage EL (low level): -1 to +8 V DC

Voltage EH (high level): 3 to 24 V DC

Output signal: Transistor contact (open collector)

Output frequency: Same as input frequency

Output contact capacity: 30 V DC, 30 mA maximum

■ Standard Performance

Insulation resistance: 100 MΩ or more at 500 V

DC between input and output, input and

power supply, input and ground, output

and power supply, output and ground, and

power supply and ground.

Withstand voltage:

DC drive 1500 V AC/min. between input and (output and power supply).

500 V AC/min. between output and power supply.

AC drive 1500 V AC/min. between input and output, input and power supply, input and ground, output and power supply, output and ground, and power supply and ground.

■ Environmental Conditions

Operating temperature range: 0 to 50°C

Operating humidity range: 5 to 90% RH (no condensation)

Power supply voltage: 85 to 264 V AC, 47 to 63Hz or 24 V DC±10%

Effect of power supply voltage fluctuations: ±0.1% of span or less for fluctuation within the operating range of power supply voltage specification.

Effect of ambient temperature change: Normal operation is guaranteed over the rated operating temperature range.

Current consumption: 24 V DC 60 mA

Power consumption: 100 V AC 6 VA

■ Mounting and Dimensions

Material: ABS resin (Case body)

Mounting method: Rack, Wall or DIN rail mounting

Connection method: M4 screw terminals

External dimensions: 72 (H) × 48 (W) × 127 (D) mm

Weight: DC; Approx.150g, AC; Approx.300g

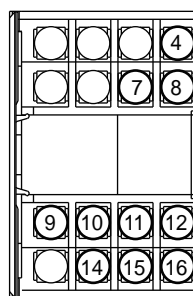
■ Standard Accessories

Tag number label: 1

Mounting block: 2

Mounting screw: M4 screw x 4

■ Terminal Assignments



4	Input	(PS+)
7	Input	(+)
8	Input	(-)
9	Output 2	(+)
10	Output 2	(-)
11	Output 1	(+)
12	Output 1	(-)
14	Supply	(L+)
15	Supply	(N-)
16	Ground	(GND)*

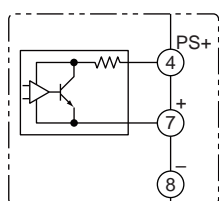
Terminals (9)–(10) are used for Output 2 only when the dual output is specified.

*: Use for AC power supply only

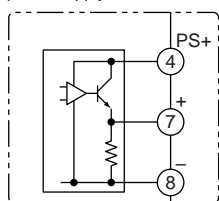
Note: This instrument may output a pulse when the power is turned on/off.
Depending on the connected devices, this pulse output is counted as "one pulse."

■ Block Diagram

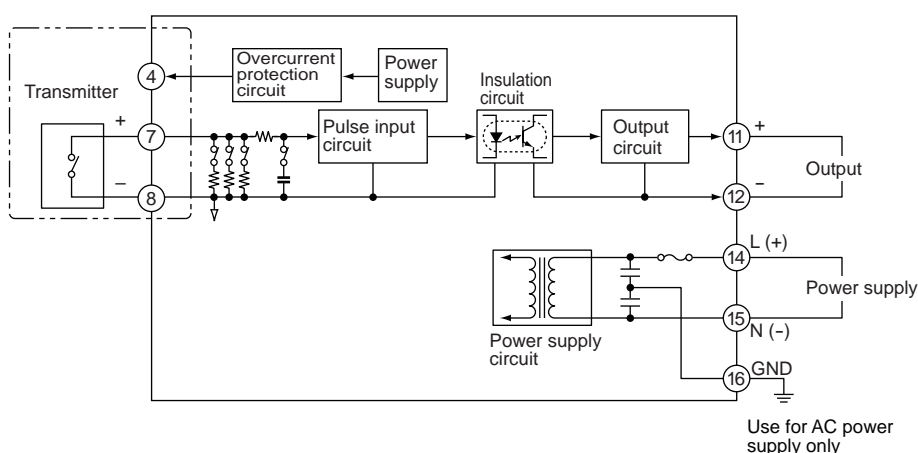
When receiving current pulse using internal resistor power supply



When receiving voltage pulse using internal transmitter power supply



When receiving a voltage-free contact signal (or an open collector signal)



■ External Dimensions

